

REMARKS

The features of Claim 4 have been included in the amended claim 1 and Claim 4 has therefore been cancelled. Claim 14 has been cancelled.

We have also deleted the expression “characterized in that” and the reference numbers in all claims in the amended set of claims.

Claim objections

Ref. item 1.: The reference numbers have been deleted.

In claim 9, the examiner also objects to the phrase “universal joint (18)” and suggests that it should be “cone (19)”. Although the specification reads “*The connector trolley during offloading operation is attached to the receiving terminal by hinge joints 18 with cone 19 which together can be considered as a universal joint.*”, a closer reading shows that it is the hinge joints that together will form a universal joint. The function of the cone is to guide the parts of the coupling towards each other when they are joined (see line 8 on page 5 in the PCT-application and figure 4) and has nothing to do with the function of a universal joint itself. Therefore, instead of changing “universal joint (18)” with “cone (19)” as suggested by the examiner, we have changed it with “hinge joints”. The basis for this amendment can be found in the sentence quoted above (in italics).

Ref. item 2.: The improper claim dependencies in Claims 6-13 have been corrected.

Claim rejections 35 USC §112

Ref. item 3.: The expression including the phrase “such as” in claim 1 has been deleted. Claim 14 has been deleted.

Claim rejections 35 USC §102

Ref. item 4.: The examiner has rejected claims 1-5 as being anticipated by Eagles (4,315,533). This publication discloses a system for transferring fluid between two marine structures using an offloading arm. The pipeline for transferring fluid comprises pipe sections AB, AC which are straight lengths of pipes that are interconnected by using swivels AD such that the pipeline forms a zig-zag pattern in a common plane. We therefore disagree with the examiner's comments (regarding former claim 4) that Eagles discloses a pipeline that is configured as a spiral.

The present invention as it is now defined in amended claim 1, includes the feature that the first pipeline section is configured as a spiral with the axis of the spiral extending generally parallel with longitudinal direction of the offloading arm. The advantage of configuring the pipeline section this way is that the spiral shape of the pipe line section provides for a smooth and continuous transfer of fluid. The zig-zag shape of the pipeline disclosed in Eagles yields a fluid flow that is more abrupt and delayed due to the pipe bends at both ends of the pipe sections AB, AC and the swivels arranged between the pipe sections.

Furthermore, the spiral shape of the pipeline of the present invention provides a simplified mounting to the loading arm as compared to the system disclosed in Eagles, as the spiral shape has the features of being self supporting. Moreover, by using a continuous spiral shape the joining of the various pipe sections by individual swivels is avoided. And finally by arranging the pipeline hanging from the loading arm in accordance with the invention, the projection of pipeline sections AB, AC out from the top side of the loading arm, thereby forming obstacles, is avoided.

On this background we believe that the invention as defined in amended claim 1, satisfy the requirements to novelty and non-obviousness as Eagles does not disclose such an invention and does not contain any indication that would prompt the skilled person to use a pipeline with a spiral shape instead of the zig-zag shape disclosed in Eagles. The dependent claims would be patentable at least based upon their dependency from claim 1.

Claim rejections 35 USC §103

Ref. item 5.: Claim 10 is a dependent claim and since we believe that the amended claim 1 is allowable, claim 10 should also be allowable.

Ref. item 6.: Claims 6-13 are dependent claims and since we believe that the amended claim 1 is allowable, claims 6-13 should also be allowable.

With this we believe that the claims are in condition whereby they may be allowed.